PATENT
YOR920000591US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Richard H. Boivie)
Serial No.: 09/696,566)
Group Art Unit: 2155)
Filed: October 25, 2000)
Examiner: Philip B. Tran)
For: MULTICAST ENABLED)
MAIL)
_____)

APPELLANT'S REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Answer dated July 2, 2007, the due date for response to which is September 4, 2007 (the first business day after September 2, 2007), Appellant hereby respectfully submits his reply brief in support of his appeal to the Board of Patent Appeals and Interferences of the Examiner's final rejection of claims 1-20 of the above-referenced application.

RESPONSE TO EXAMINER'S ARGUMENTS

RESPONSE TO THE EXAMINER'S DOUBLE PATENTING REJECTION

The Examiner rejected Claims 8-20 under the judicially created doctrine of obviousness-type double patenting as being unpatentable of some claims of co-pending U.S. Patent Application No. 09/696,116 in view of Francis et al. U.S. Patent No. 5,331,637. The Examiner further states that this

is a provisional obviousness-type double patenting rejection because the claims of the related application have not yet been patented.

With respect to Claims 8 and 10, the Appellant respectfully believes in view of the remarks and arguments presented in the Appellant's Appeal Brief, Francis has been removed as a relevant prior art reference and therefore, the obviousness-type double patenting rejection can no longer stand. However, even so, the Applicant respectfully disagrees with the Examiner that Francis et al. teaches that "the multicast packet includes a packet header comprising the plurality of destination network address wherein at least one of the plurality of destination network address is a unicast address", as discussed in further detail in the Appellant's Appeal Breif.

Furthermore, The U.S. Patent Application No. 09/696,116 is commonly assigned herewith to International Business Machines Corporation of New York, includes the same inventor as the present invention, and was filed on the same day, October 25, 2000, as the present invention. Although the Applicant believes there is no double patenting with the present invention in view of the U.S. Patent Application No. 09/696,116 application since the present invention is directed towards multicast enabled web content distribution and the present invention is directed towards multicast enabled e-mail, the Applicant, if required, is not adverse to submitting a terminal disclaimer if/when the U.S. Patent Application No. 09/696,116 is allowed by the Examiner. Accordingly, since Francis et al. has been disqualified as a prior art reference and in view of the remarks and arguments present in the Appellant's Appeal Brief , the Examiner is respectfully requested to withdraw the provisional rejection of the Claims 8-20 based on obviousness-type double patenting.

THE INDEPENDENT CLAIMS ARE PATENTABLE OVER HAGGERTY ALONE AND/OR IN COMBINATION WITH HARDJONO AND/OR FRANCIS

The Examiner has taken the position that Haggerty (U.S. Patent No. 6,331,983) discloses "receiving a mail message that is created and sent by a user, the user associating the mail message

with a plurality of individual destinations". [Examiner's Answer at 9, 30-32] This position of the Examiner is respectfully traversed.

The pending independent claims recite methods and devices for distributing electronic mail efficiently across a network utilizing a multicast packet and using a reliable multicast technique in which a mail message is received that is created and sent by a user, wherein the user has associated the mail message with a plurality of individual destinations, and wherein a single copy of the mail message is sent in a multicast packet using a reliable multicast technique. Thus, the claims require **a user** to create a mail message, **the user** to associate a plurality of individual destinations with the mail message, and then sending this mail message with the plurality of individual destinations in a multicast packet using a reliable multicast technique. In contrast, Haggerty discloses a multicast packet that includes a **single** multicast **group address**, i.e. a single address that is associated with a multicast group and **not** an **individual destination network address** as recited for the presently claimed invention. Haggerty even further stresses this point by explicitly teaching that a **Class D IP address**, which is used for standard multicasting, is used. See Haggerty at col. 13, lines 10-35. Nowhere does Haggerty teach or suggest a method or device for distributing electronic mail efficiently across a network utilizing a multicast packet and using a reliable multicast technique in which a mail message is received that is created and sent by a user, wherein the user has associated the mail message with a plurality of individual destinations, and wherein a single copy of the mail message is sent in a multicast packet using a reliable multicast technique.

The Examiner's assertion that Haggerty teaches [Examiner's answer at page 30] "receiving multicast packet with destinations IP addresses of a multicast group" at column 11, line 60 to col. 12, line 15 and col. 12, line 55 to col. 13, line 12 is invalid. As best as the Appellant can make out, the Examiner is asserting that Haggerty teaches a multicast packet is received with more than one destination IP address of a multicast group. The Examiner is respectfully reminded that standard multicast, as clearly taught by Haggerty is only associated with a **single** multicast **group address**. As repeated many times throughout the prosecution history, the definition of a standard multicast packet as taught by Haggerty states that a single multicast group address is used. See Haggerty at

col. 3, lines 66-67 to col. 4, lines 1-2 and col. 13, lines 10-35. Therefore, it is impossible for Haggerty to teach "receiving multicast packet with destinations IP addresses of a multicast group". The Appellant respectfully requests that the Examiner carefully examiner the figures on pages 15-16 of the Appellant's Appeal brief and their accompanying text. These figures clearly illustrate the obvious differences between Haggerty and the presently claimed invention.

To support the Examiner's assertions above, the Examiner takes an additional position that "[o]f course, **the packet** (message) is associating with a plurality of individual destinations since there are multiple receivers or subscribers receiving multicast packet (message)". Even though the Examiner states the he is taking the "broadest reasonable interpretation within the scope of the art", this interpretation is unreasonable, improper, and clear error by the Examiner, as shown by the various points listed below. Because all of the Examiner's assertions are based on this position, if the Examiner is incorrect in his assertion that "the packet (message) is associating with a plurality of individual destinations since there are multiple receivers or subscribers receiving multicast packet (message)" is the same as the presently claimed "…receiving a mail message that is created and sent by a user, **the user** associating the mail message with a plurality of individual destinations; and sending a single copy of the mail message, in a multicast packet and using a reliable multicast technique to the plurality of individual destinations, the plurality of individual destinations corresponding to a plurality of individual destination network addresses…" then all of the Examiner's rejections are improper and should be reversed. The Examiner is incorrect for at least the following reasons.

First, the Examiner's position is that "**the packet** (message) is associating with a plurality of individual destinations…" The independent claims, on the other hand, require that **a user** associate the email message with a plurality of individual destinations. The Examiner is improperly construing the claim language and is improperly taking the claim language out of context, as further discussed below.

Second, in standard multicast as taught by Haggerty, which is receiver oriented because the receivers, and not the sender, associate themselves with a multicast group address, a multicast packet is sent to a **single** multicast **group address**. The sender, for example, has **no** way of selecting which receiver will or will not receive the multicast message. The message is sent to all subscribing recipients or to none. The sender lacks control over how to specifically select which recipients to associate with a multicast message. Haggerty explicitly states "to send an IP multicast datagram (packet), the sender specifies the IP multicast **group address**". See Haggerty at col. 3, lines 66-67. Each recipient associates itself with the multicast group address. However, each recipient does not associate with any particular multicast message packet. Also, each recipient normally does **not** know any other recipient associated with the multicast group address, and could not associate any other possible recipient with the multicast group address. Only each recipient can subscribe with the multicast messaging server and only for their own recipient destination to receive any multicast message packet addressed to the multicast group address.

Also, according to Haggerty, the final destinations are not specified by the sender, only the multicast **group address** is specified by the sender. Please note that the sender in traditional multicast, such as taught in Haggerty, is not a user. The sender is a multicast server device in the network. Also, using traditional multicast, as taught by Haggerty, is inappropriate for distributing mail to addresses specified by a sender since in traditional multicast the sender (e.g., a multicast server device) does not associate any particular destinations with a multicast message. According to an embodiment of the presently claimed invention, on the other hand, the sender (i.e., including the user) specifically associates the individual destinations, by their individual destination addresses, with the mail message created by the sender. This is very different than Haggerty, and therefore the Examiner's interpretation of Haggerty is unreasonable and incorrect.

Third, a single multicast group address**,** as taught by Haggerty, is **NOT** the same as a plurality of individual destinations that correspond to a plurality of individual destination network addresses. In standard multicast, as taught by Haggerty, receivers subscribe and associate themselves with a multicast group address. The Appellant respectfully suggests that the Examiner is incorrectly

confounding a single multicast group address to be the same as a plurality of individual destinations that correspond to a plurality of individual destination network addresses. As noted in the Appellant's Appeal Brief, Haggerty explicitly teaches that "[m]ulticast is a receiver-based concept: receivers join a particular multicast session group and traffic is delivered to all members of that group. **The sender does not need to maintain a list of receivers**" and "a multicast IP packet does not contain an IP destination host address, but rather contains a destination IP address of a multicast group." See Haggerty at col. 1, lines 30-33 and 10-12. In other words, the multicast packet, as taught by Haggerty, does not have any information as to **who** the receivers of the packet will be, the packet only contains a single multicast **group address** to which receivers have subscribed. In other words, the multicast packet only has information to get the packet to the multicast **group**, without specifically identifying individual recipients. Once the router receives the multicast packet, which includes the single multicast group address, the router checks whether any of its local hosts (found in a local list in the router) are subscribed to the group addressed by the multicast packet and the router then forwards a copy of the packet accordingly. The multicast packet, as taught by Haggerty, does not contain any information regarding who specifically receives the multicast group packet.

Therefore, Haggerty is completely inappropriate for distributing mail to addresses specified by the sender since in a mail system the sender/user specifies the receivers while in traditional multicast, such as in Haggerty, the receivers are the ones that individually subscribe to receive a multicast message and the sender (e.g., the multicast server) does **not** control (does not affirmatively associate the message with) who will be the specific individual receivers in the plurality of recipients of the multicast message.

Fourth, Claim 1 also recites "…sending a single copy of the mail message, in a multicast packet and using a reliable multicast technique, across the network via at least one intermediate node to the plurality of individual destinations, the plurality of individual destinations corresponding to a plurality of individual destination network addresses. The phrase "plurality of individual destinations" is referring back to the first claim element of "receiving a mail message that is created and sent by a user, the user associating the mail message with a plurality of individual destinations".

Therefore, Haggerty or a combination of Haggerty with the other references would have to teach a mail message that is created and sent by a user and sending a copy of the mail message in a multicast packet to the plurality of individual destinations that have been associated with the mail message by the sender and that correspond to a plurality of individual destination network addresses in the multicast packet header. Haggerty and the other references simply do not teach this

As discussed above, Haggerty does **not** teach the first claim element and only teaches that a standard multicast packet is received that has a **single multicast group address**. Therefore, Haggerty cannot teach sending a copy of the mail message in a multicast packet to the plurality of individual destinations that have been associated with the mail message by the sender and that correspond to a plurality of individual destination network addresses. Also, a destination network address is the actual physical address of the device that is to receive the mail message. As stated above, Haggerty only teaches that the multicast packet contains a **single multicast group address**. Haggerty does not teach or suggest that the physical addresses of the plurality of destinations are included within the multicast packet.

Appellant fails to understand why the Examiner finds that Haggerty teaches sending a copy of a mail message, that **a user** has created and associated with a plurality of **individual destinations**, in a multicast packet and using a reliable multicast technique. As has been discussed above, this claim limitation recited for the present claims along with the other claim limitations of the presently claimed invention are contrary to the teaching of Haggerty. As discussed herein and extensively throughout the prosecution history, Haggerty only teaches **standard multicasting** which does **not** include and is contrary to a mail message being created and associated with a plurality of individual destinations by a user and sending a copy of this message in a multicast packet and using a reliable multicast technique. Any other interpretation of Haggerty is improper and unreasonable. The Appellant respectfully suggests that the Examiner has ignored the teachings of Haggerty and is incorrectly reading the present claim language on Haggerty, which is clear error. Additionally, Haggerty, any of the cited prior art, or any combination thereof, do **not** teach or suggest, the presently claimed invention as discussed above. The Examiner has failed to make a prima facie obviousness

rejection under 35 USC 103. Therefore, the independent claims are patentable over the Haggerty reference alone or in any combination with any one or more of the cited references.

Furthermore, the Examiner comments that on page 30 of the Examiner's answer that the Appellant is attacking the references individually "without taking into consideration based on the teaching of combinations of references…". The Appellant reminds the Examiner that the present 103 rejections stated that Haggerty teaches various elements of the independent claims and does not teach various elements of the independent claims. The additional references were brought in to overcome the deficiencies of Haggerty. A proper response to a 103 rejection must address not only the references as a combination but also the references individually. This is because if a reference in fact does not teach what the Examiner alleges the reference to teach, this reference fails to qualify as a prior art reference and the prima facie obviousness rejection under 35 USC 103 fails. Each and every element of a claim must be taught by the combination of references. When the Examiner stated that Haggetry alone teaches a specific claim element, the Appellant illustrated how Haggerty alone did not teach such claim element in question. The Appellant also illustrated how a combination of the references also did not teach the subject matter of the independent claims. Therefore, the Appellant's response to the 103 rejection was proper.

With respect to Hardjono, the Examiner once again takes the position "that the packet (e-mail message) is associating with a plurality of individual destinations since there are multiple receivers or subscribers (corresponding to a plurality of users that each are on a mailing list) receiving multi-cast packet (e-mail message)". The above arguments and remarks apply here as well and will not be repeated. As stated many times already throughout the prosecution history, Hardjono merely mentions in the background section "[o]ne simple example of multicasting entails transmitting an Email message to a plurality of users that each are on a mailing list." See Hardjono at col. 1, lines 15-17. Hardjono never again mentions an email message nor how to use multicast with an email message. Therefore, Hardjono is **not enabling** with respect to using multicast with an email message as claimed herein. The Examiner's comment "…corresponding to a plurality of users that each are on a mailing list) receiving multi-cast packet (e-mail message) is not supported in Hardjono

or even suggested by Hardjono. Furthermore, a mailing list is not the same as the presently recited invention and is similar to standard multicast. Hardjono even teaches using **conventional multicast** for its communications. Therefore, the presently claimed invention distinguishes over Haggerty alone and/or in view of Hardjono.

With respect to Francis, the Examiner asserts that Francis teaches "wherein the multicast packet includes a packet header comprising the plurality of individual destination network addresses, wherein at least one of the plurality of individual destination network addresses is a unicast address, and wherein the mail message is destined for reception at the individual destination corresponding to the unicast address as an ordinary unicast packet". Francis, like Haggerty is concerned with standard multicasting. Francis merely describes the use of unicast packets to build a multicast distribution tree. There is **no** discussion of multicast packets in this citation let alone "a packet header comprising the plurality of individual destination network addresses, wherein at least one of the plurality of individual destination network addresses is a **unicast address**, and wherein the mail message is destined for reception at the individual destination corresponding to the unicast address as an ordinary unicast packet".

Furthermore, Francis at col. 6, lines 35-54 teaches a packet has a single address that corresponds to a multicast group. Francis at col. 7, line 38 to col. 8, line 33 merely describes a mechanism for building a multicast distribution tree. This citation does not teach the above claim element as well. Col. 11, lines 27-48 of Francis merely teaches that a node not in a multicast group can forward a received multicast packet. The node retrieves information from a unicast forwarding table being kept at the node itself and lookups up the multicast address of the core node. This does not teach the above claim element.

In fact because the claim language at issue includes language that refers back to the first element of claim 1, to read upon claim 1 and overcome the deficiencies of Haggerty, Francis is required to teach a mail message that is created and sent by a user and sending a copy of the mail message in a multicast packet to the plurality of individual destinations that have been associated

with the mail message by the sender and that correspond to a plurality of individual destination network addresses, wherein the multicast packet includes a packet header comprising the plurality of individual destination network addresses, wherein at least one of the plurality of individual destination network addresses is a unicast address, and wherein the mail message is destined for reception at the individual destination corresponding to the unicast address as an ordinary unicast packet. Because Francis teaches standard multicast packets, Francis cannot teach a mail message received by a user that a user has associated with a plurality of individual destinations and at least one of these destinations receives the message as an ordinary unicast packet. As discussed above, nowhere does Francis teach this. Therefore, the presently claimed invention distinguishes over Haggerty alone and/or in view of Francis for at least these reasons.

THE DEPENDENT CLAIMS ARE PATENTABLE OVER HAGGERTY ALONE AND/OR IN COMBINATION WITH HADJONO AND/OR IN COMBINATION WITH FRANCIS

As discussed above, the independent claims are patentable over the Haggerty reference alone, and/or in view of Hardjono and/or in view of Francis. Since dependent claims contain all the limitations of the independent claims, claims 2, 4-5, 7, 9-12, 14-16, and 18-20, and 15-19 distinguish over Haggerty and/or Hardjono and/or Francis as well.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application and all of the pending claims are in condition for allowance. Reversal of the final rejection of claims 3, 5-10, 12-16, 18-22, 24, and 25 is respectfully requested.

Respectfully submitted,

Date: September 4, 2007

By: /Jose Gutman/

Jose Gutman
Reg. No. 35,171

FLEIT, KAIN, GIBBONS, GUTMAN
BONGINI & BIANCO P.L.
551 N.W. 77th Street, Suite 111
Boca Raton, FL 33487
Tel (561) 989-9811
Fax (561) 989-9812